

CLAIMS

1 1. A system for enhancing sales for service providers by utilizing an opportunistic approach  
 2 based on an unexpected change in a schedule of service, said system comprising:  
 3 an event retriever, said event retriever generating an event pair which comprises a target  
 4 value and an actual value associated with said schedule of services;  
 5 an event observer, said event observer receiving said event pairs from said event retriever,  
 6 calculating the difference between said actual and target value, and based on one or more  
 7 rules from a first set of rules, identifying and notifying a window of opportunity detector  
 8 regarding potential windows of opportunities;  
 9 said window of opportunity detector, which receives said potential windows opportunities,  
 10 detects, based on one or more rules from a set of second rules, if a window of opportunity  
 11 exists, and if so, matches said detected windows of opportunities with service providers for  
 12 the purposes of enhancing sales.

1 2. A system for enhancing sales for service providers by utilizing an opportunistic approach  
 2 based on an unexpected change in a schedule of service, as per claim 1, wherein said event  
 3 retriever further utilizes service provider schema information stored in a service provider  
 4 schema database to generate said event pairs.

1 3. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 2, wherein said service  
3 provider schema is a document type definition (DTD).

1 4. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 2, wherein said service  
3 provider schema is an XML schema.

1 5. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said one or  
3 more rules from said set of first rules is a threshold rule, and said potential windows of  
4 opportunities are identified based on comparing said difference between said actual and  
5 target value against said threshold.

1 6. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said one or  
3 more rules from said set of second rules are provided externally by said service providers.

1 7. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said system  
3 further accesses a subscription management service wherein said events and schedules are  
4 defined for tracking.

1 8. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said one  
3 more rules of said set of first and one or more rules of a set of second rules are stored in a  
4 rule database.

1 9. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said events  
3 are Internet Calendaring and Scheduling Core Object Specification (iCalendar) events.

1 10. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said event  
3 retriever further comprises:

4 an enhanced gatherer, which dynamically receives information from service providers over  
5 a network using simulated user interaction, and

6 a pattern matcher, which extracts said event pair from said received information based on  
7 matching the structure of said received information with that of a stored schema of said  
8 service providers.

1 11. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 10, wherein said  
3 enhanced gatherer is a web crawler.

1 12. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 10, wherein said  
3 network comprises any of the following: local area networks (LANs), wide area networks  
4 (WANs), wireless networks, or the Internet.

1 13. A system for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 1, wherein said  
3 received event pairs are extracted from a markup language form.

1 14. An e-commerce method for enhancing sales to potential customers, one or more steps of said  
2 method performed over a network, said method comprising:  
3 electronically acquiring service schedules of one or more service providers;  
4 detecting one or more thresholds of opportunity for sales to said potential  
5 customers based on periods of time of customer inactivity within said service schedules;  
6 providing notification of said opportunity to said service provider, and  
7 wherein said service providers offer sales to said potential customers during said period  
8 of inactivity.

1 15. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 14, wherein said step  
3 of detecting a window of opportunity comprises of:  
4 detecting an unexpected change in said schedule;  
5 checking if people are blocked due to said unexpected change in schedule;  
6 checking if service providers benefit from said blocked scenario, and  
7 wherein said window of opportunity is detected if said service providers are going to benefit  
8 from said blocked scenario.

1 16. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 15, wherein said step  
3 of detecting an unexpected change in said schedule further comprises:  
4 simulating user interaction via data gathering software to request data from service providers  
5 via a network;  
6 receiving information from said service providers via said network;  
7 accessing a service provider schema database and reading schema regarding said service  
8 providers;  
9 matching said received information with said read schema associated with said service  
10 providers, and  
11 extracting data events, comprising actual and target data, based on said matching step.

1 17. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 16, wherein said  
3 network comprises any of the following: local area networks (LANs), wide area networks  
4 (WANs), wireless networks, or the Internet.

1 18. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 15, wherein said data  
3 gathering software comprises data mining software.

1 19. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of service, as per claim 15, wherein said  
3 extracted data events are iCalendar events.

1 20. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, wherein said method  
3 comprising:  
4 extracting standardized event data comprising an actual event value and a target value, from  
5 said travel service provider via a network;  
6 comparing, based on one or more rules from a set of first rules, the difference of said actual  
7 value and target value against a threshold value;  
8 detecting a window of opportunity based on one or more rules from a set of second rules,  
9 and  
10 distributing said window of opportunity information to said service providers for enhancing  
11 said service provider's sales, if said detection of window of opportunity occurs.

1 21. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
3 travel services comprises any of: airlines, trains, or buses.

1 22. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
3 event data is arrival or departure times and locations associated with said specific airline.

1 23. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
3 one or more rules from said set of first rules is based on said difference of actual and target  
4 values being above or below a predetermined threshold.

1 24. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
3 one or more rules from said set of second rules is based on rules provided by service  
4 providers.

1 25. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 24, wherein said  
3 rules provided by service providers are stored in a rules database.

1 26. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
3 step of extracting standardized event data further comprises:  
4 accessing said travel service provider's webpage over a network;  
5 posting data regarding a specific travel provider in said webpage and querying for  
6 information regarding schedule of said specific travel service;  
7 receiving a web document from said travel service provider regarding said schedule of said  
8 specific travel provider;  
9 accessing a service provider schema database and reading a schema associated with said  
10 travel service provider;  
11 matching said received web document with said read schema and extracting event data, and  
12 standardizing said extracted event data.

1 27. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 24, wherein said  
3 network comprises any of the following: local area networks (LANs), wide area networks  
4 (WANs), wireless networks, or the Internet.

1 28. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 26, wherein said  
3 step of posting data is accomplished using a HTTP POST command.

1 29. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 26, wherein said  
3 web document is of any of following formats: HTML, SGML, or XML.

1 30. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 26, wherein said  
3 read schema is an XML schema.

1 31. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 26, wherein said  
3 read schema is a DTD.

1 32. A method for enhancing sales for service providers by utilizing an opportunistic approach  
2 based on an unexpected change in a schedule of travel services, as per claim 26, wherein said  
3 step of standardizing involves standardizing based on iCalendar standard.

1 33. An article of manufacture comprising a computer user medium having computer readable  
2 code embodied therein which provides for a e-commerce method for enhancing sales to  
3 potential customers, said article comprising:  
4 computer readable code electronically acquiring service schedules of one or more service  
5 providers;  
6 computer readable code detecting one or more thresholds of opportunity for sales to said  
7 potential customers based on periods of time of customer inactivity within said service  
8 schedules;  
9 computer readable code providing notification of said opportunity to said service provider,  
10 and wherein said service providers offer sales to said potential customers during said period  
11 of inactivity.